

SUSTAINABILITY GROUP

VanRIMS No.: 08-2000-20

MEMORANDUM

October 27, 2008

TO: Standing Committee on Traffic and Transportation

CC: Judy Rogers, City Manager

Jody Andrews, Deputy City Manager James Ridge, Deputy City Manager Brent Toderian, Director of Planning

Francie Connell, Director of Legal Services

Christine Warren, Director of Development Services

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FROM: D. Ramslie, MSc LEED AP

Manager, Sustainable Development Program

SUBJECT: RTS-7458 EcoDensity Revised Action Item C-10 Amendments to the Zoning and

Development Bylaw to remove barriers to Green Building Approaches

This memo reports to City Council on the matter of EcoDensity Revised Action Item C-10 Amendments to the Zoning and Development Bylaw to remove barriers to Green Building Approaches to modify language in the proposed amendment to the Zoning and Development Bylaw in Appendix A of the report referenced above that better reflects what is currently discussed in the body of the report.

RECOMENDATION

A. THAT Council replace the Appendix A of RTS-7458 - ECODENSITY REVISED ACTION ITEM C-10 AMENDMENTS TO THE ZONING AND DEVELOPMENT BYLAW TO REMOVE BARRIERS TO GREEN BUILDING APPROACHES with the appendix attached to this memo.

DISCUSSION

This memo is to modify language in the proposed bylaw amendment that better reflects what is proposed in the body of the above referenced report. The goal of the exemption proposed to provide for thicker wall assemblies is intended to remove the



disincentive of losing saleable floor area associated with providing thicker walls required for improved insulation.

The wording currently proposed in the report could be interpreted to remove the entire wall assembly from the floor area calculation and not just the extra space required to provide the additional insulation. The wording attached to this memo proposes a revised amendment to the bylaw that clarifies that only the extra space required to improve the insulation of the wall is recommended to be exempted.

In the case of wood frame construction for one and two family dwellings and any building that contains only residential uses and falls under the scope of Part 9 of Division B of the Building By-law the extra space required in exterior walls is generally 50 mm (2 inches) to achieve the required RSI 3.85 (R-22) and is therefore recommended to be exempted. This will result, in most cases, in a total exterior wall thickness of up to 202 mm (8 inches)

In the case of all other types of construction (i.e., buildings that generally fall under Part 3 of the Building By-law), the maximum amount of extra wall thickness at the exterior which is recommended to be exempted from FSR is 127 mm (5 inches), where the desired thermal performance of RSI 2.67 (R-15) for the whole wall assembly including glazing can be verified by a registered professional.

Staff will provide additional clarity in the draft bulletin in Appendix D of the referenced report that will reflect this memo's proposed changes to recommended bylaw amendment prior to enactment.

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DR/

PROPOSED MISCELLANEOUS TEXT AMENDMENTS ZONING AND DEVELOPMENT BY-LAW

[All additions are shown in **bold italics**. Deletions are shown in strikeout.]

By-law amendments will be prepared generally in accordance with the provisions listed below and are subject to change and refinement prior to by-law posting.

Section 10 General Regulations

- 10.7.1 The following features shall be permitted in any required yard:
 - (a) steps, except that no steps shall be permitted in any side yard except an exterior side yard;
 - (b) eaves, gutters, sills and chimneys or other similar projections as determined by the Director of Planning, if they do not project more than 540 mm, measured horizontally, into a required yard;
 - (c) balconies on multiple dwellings, if:
 - (i) they do not project more than 1.2 m into a required yard and in no case are closer than 2.1 m to an interior side property line; and
 - (ii) the safety railing does not extend more than 1 070 mm above the floor of the balcony.
 - (d) fixed horizontal external shading devices including canopies, awnings, and overhangs, if:
 - (i) they are cantilevered;
 - (ii) they do not project more than 1.2 m measured at right angles to the face of the building; and
 - (iii) they are not located closer than .3 m measured horizontally from any window of a habitable room where any part of such window is located below the level of the canopy.
 - (e) bay windows, if:
 - (i) they do not project more than 540 mm into the required yard;
 - (ii) the bottom outside edge of the bay is not less than 300 mm above the floor level;
 - (iii) the area contained within the bay window projection is not used for any purpose other than to provide light and ventilation.
 - (f) any other features which, in the opinion of the Director of Planning, are similar to any of the features listed above.

10.11.1 Discretionary Increases in Height for Any Building

The Director of Planning may, at his discretion, permit a greater height than otherwise permitted for the following items if they do not, in total, exceed one-third of the width of the building or buildings as measured on any elevation drawings and do not, in total, cover more than 10 percent of the roof area on which they are located as viewed from directly above:

- (a) architectural appurtenances such as towers, turrets, **and** cupolas and roof garden access, provided:
 - (i) no additional floor area is created; and
 - (ii) no protrusion extends more than 1.1 m above the height limitation;

- (b) mechanical appurtenances such as elevator machine rooms;
- (c) chimneys:
- (d) roof-mounted energy technologies including solar panels and wind turbines, provided:
 - (i) the Director of Planning approves their :
 - (A) siting and sizing in relation to views, overlook, shadowing, and noise impacts, and
 - (B) architectural design in relation to the surrounding environment; and (ii) they comply with the Building By-law;
- (e) access and infrastructure, including higher elevators, pergolas, trellises, and tool sheds, to maintain and support intensive green roofs or urban agriculture provided:
 - (i) the Director of Planning approves their :
 - (A) siting and sizing in relation to views, overlook, shadowing, and noise impacts, and
 - (B) architectural design in relation to the surrounding environment; and (ii) they comply with the Building By-law; and
- (f) items similar to any of the above.

10.34 Exterior walls in CD-1 districts

- 10.34.1 Despite anything to the contrary in any CD-1 by-law listed in the CD-1 (Comprehensive Development) District Schedule, and subject to section 10.34.2, computation of floor space ratio or floor area is to exclude with respect to exterior:
- (i) wood frame construction walls greater than 152 mm thick that meet the standard RSI 3.85 (R-22), or
- (ii) walls other than wood frame construction greater than 152 mm thick that meet the standard RSI 2.67 (R-15),

the area of such walls that exceeds 152 mm to a maximum exclusion of 50 mm of thickness for wood frame construction walls and 127 mm of thickness for other walls, except that this clause is not to apply to walls in existence before March 14, 2000.

- 10.34.2 A registered professional must verify that any wall referred to in section 10.34.1 meets the standards set out therein except that this requirement does not apply to one-family dwellings, two-family dwellings, or any building that contains only residential uses and is subject to Part 9 of Division B of the Building By-law.
- 3. Council repeals each of the subsections referred to in Schedule A to this By-law of each of the district or districts schedules also referred to in Schedule A (listed on the following pages), and substitutes:

"subject this section, with respect to exterior:

(i) wood frame construction walls greater than 152 mm thick that meet the standard RSI 3.85 (R-22), or

(ii) walls other than wood frame construction greater than 152 mm thick that meet the standard RSI 2.67 (R-15),

the area of such walls that exceeds 50 mm to a maximum exclusion of 204 mm of thickness for wood frame construction walls and 127 mm of thickness for other walls, except that this clause is not to apply to walls in existence before March 14, 2000.

A registered professional must verify that any exterior wall referred to in in the preceding section meets the standards set out therein except that this requirement does not apply to one-family dwellings, two-family dwellings, or any building that contains only residential uses and is subject to Part 9 of Division B of the Building By-law."

ZDBL zones:

Limited Agriculture	
RA-1	4.7.3(g)
One-Family Dwelling	
RS-1	4.7.3(h)
RS-1A	4.7.3(g)
RS-1B	4.7.3(g)
RS-2	4.7.3(g)
RS-3 and RS-3A	4.7.3(i)
RS-4	4.7.3(g)
RS-5	4.7.3(i)
RS-6	4.7.3(j)
RS-7	4.7.4(j)
Two-Family Dwelling	
RT-1	4.7.3(g)
RT-2	4.7.3(g)
RT-3	4.7.3(i)
RT-4, RT-4A, RT-4N and RT-4AN	4.7.3(h)
RT-5, RT-5A, RT-5N and RT-5AN	4.7.3(h)
RT-6	4.7.3(i)
RT-7	4.7.3(h)
RT-8	4.7.3(h)
RT-9	4.7.3(h)
RT-10 and RT-10N	4.7.3(g)
Multiple Dwelling	
RM-1 and RM-1N	4.7.3(g)
RM-2	4.7.3(g)
RM-3	4.7.3(g)
RM-3A	4.7.3(g)
RM-4 and RM-4N	4.7.3(g)
RM-5, RM-5A, RM-5B and RM-5C	4.7.3(i)
RM-6	4.7.3(i)
FM-1	4.7.3(h)
Commercial	
C-1	4.7.3(f)
C-2	4.7.3(f)
C-2B	4.7.3(f)

C-2C C-2C1 C-3A C-5 and C-6 C-7 and C-8 FC-1 Industrial	4.7.3(f) 4.7.3(e) 4.7.3(e) 4.7.3(e) 4.7.3(f) 4.7.3(f)
MC-1 and MC-2	4.7.3(f)
M-1	4.7.3(e)
M-1A	4.7.3(e)
M-1B	4.7.3(e)
M-2	4.7.3(e)
IC-1 and IC-2	4.7.3(f)
IC-3	4.7.3(f)
I-1	4.7.3(f)
I-2	4.7.3(f)
I-3	4.7.3(f)
Historic Area HA-1 and HA-1A HA-3	4.7.1 4.7.3(f)

ODP's:

Downtown District	6(e)
DTES/Oppenheimer	4.5.2(e)
First Shaughnessy	4.1.3(f)
Southeast Granville Slopes	6.3.3(a)